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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,045	03/11/2004	Jin-Guang Teng	007198-587	4689

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BUCHANAN, INGERSOLL & ROONEY PC  
POST OFFICE BOX 1404  
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EXAMINER
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CHAPMAN, JEANETTE E

ART UNIT	PAPER NUMBER
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3633

NOTIFICATION DATE	DELIVERY MODE
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11/19/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/797,045	<b>Applicant(s)</b> TENG, JIN-GUANG	
	<b>Examiner</b> Jeanette E. Chapman	<b>Art Unit</b> 3633	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 June 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,7-9 and 11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,7-9,11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 7-9, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kushida (JP 61028630) in view of Mirmiran et al (5599599).

Claim 1.

Kushida a double-skin tubular structural member including:

- a reinforced polymer outer tube 3 lacking a majority of fibres

oriented generally circumferentially around said fibre reinforced polymer outer tube;

(Mirmiran discloses a plurality of fibre reinforced polymer layers (column 3, line 62 through column 4 line 10) including a majority of fibers oriented circumferentially around the tube.

Mirmiran discloses a filler mater provided between the outer tube and the inner tube. See also figure 3B)

-a steel a inner tube 1, said steel inner tube being -

a concrete/mortar filler material 10 provided between said outer tube and said steel inner tube.

claim 7.

Mirmiran discloses said outer fibre-reinforced polymer tube is constructed from a plurality of layers of fibre-reinforced polymer.

claim 8.

Art Unit: 3633

Mirmiran a said outer fibre-reinforced polymer tube is constructed using a filament winding process. See column 3, line 66 through column 4, line 3

9. (Currently Amended) A method of constructing a double-skin tubular structural member comprising the steps of:

- providing a pre-formed polymer outer tube 3 but lacks a majority of fibres oriented ,generally circumferentially around said fibre reinforced polymer outer tube;

(Mirmiran discloses a plurality of fibre reinforced polymer layers (column 3, line 62 through column 4 line 10) including a majority of fibers oriented circumferentially around the tube.

Mirmiran discloses a filler mater provided between the outer tube and the inner tube. See also figure 3B and accompanying text)

- providing a steel inner tube/pipe 1; pipes are defined as hollow elongated tubes, said steel inner tube/pipe is thus hollow from generally metallic materials; and

- inserting concrete/mortar 10 (which inherently includes aggregate material thus a bound aggregate as a filler material ; the concrete is located between said outer tube and said steel inner tube.

Mirmiran discloses an aggregate filler; see column 4, lines 24 -32

claim 11.

Kushida discloses said polymer outer tube 3 acts as a construction form/ cast during a curing stage of the filler material. See abstract.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chapman E. Jeanette whose telephone number is 571-272-6841.

The examiner can normally be reached on Mon.-thursday, 8:30-6:00, every fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on 571-272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JEANETTE CHAPMAN/  
PRIMARY PATENT EXAMINER  
ART UNIT 3633